



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,340	02/11/2004	Kimihiko Nishioka	061069-0308250	8542
909	7590	02/03/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			LESTER, EVELYN A	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2873	

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

8/1

<b>Office Action Summary</b>	Application No. 10/775,340	Applicant(s) NISHIOKA ET AL.	
	Examiner Evelyn A. Lester	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

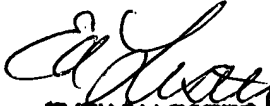
**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**EVELYN LESTER**  
**PRIMARY EXAMINER**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-11-04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I in the reply filed on 10-28-05 is acknowledged.
2. Please note that upon further consideration by the Examiner, the previous restriction has been withdrawn. Therefore, claims 1-32 have been examined on their merits, this office action.

***Specification***

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

For example, the disclosure is objected to because of the following informality as noted on page 15, line 16, "fin" should be corrected to read ---thin---. This is but one example of the possible errors in the specification.

Appropriate correction is required.

***Priority***

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

5. It is noted that the application has been filed as a certified translation of the foreign priority document. Therefore, a translation of the papers has been made of record, in accordance with 37 CFR 1.55, for purposes of overcoming any prior art rejections, wherein the prior art reference has a file date or published date (respectively in relation to particular rejection requirements), which is not prior to the foreign priority date. See MPEP § 201.15.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-32 are rejected as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are as follows:

In claims 1 and 4, the optical apparatus has an optical system provided with a variable optical property element. The functional recitations do not provide adequate structural relationship of the optical system within the optical apparatus, or the variable optical property element to the optical system and/or the optical apparatus. Further,

while features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claim 2, the optical apparatus has a variable optical property element, a driving circuit driving the variable optical property element, and an electronic zoom function. It is not clear how the electronic zoom function relates to the other claimed elements and/or within the optical apparatus. Further, if the "electronic zoom function" is functional language only, there is no structure in the claim to provide this function. While features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claims 5 and 6, the optical apparatus has an optical system provided with a plurality of combined units, wherein one of the units has a variable optical property element. The functional recitations do not provide adequate structural relationship of the optical system within the optical apparatus, or the variable optical property element to the optical system and/or the optical apparatus. Further, while features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claim 12, the optical apparatus has an optical system with an electronic zoom function. There is no structural relationship for any of the claimed elements, and it is not clear whether the electronic zoom function is an element or just a function. If the “electronic zoom function” is functional language only, there is no structure in the claim to provide this function. While features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claims 13, 14 and 15, the optical apparatus has a variable optical property element, a driving circuit driving the variable optical property element, and an electronic zoom function. It is not clear how the electronic zoom function relates to the other claimed elements and/or within the optical apparatus. Further, if the “electronic zoom function” is functional language only, there is no structure in the claim to provide this function. Also, the functional recitations in the claim language do not provide adequate structural relationship of the optical system within the optical apparatus, or the variable optical property element to the optical system and/or the optical apparatus. While features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claim 16, the optical apparatus has a variable optical property element, a driving circuit driving the variable optical property element, an image sensor and an

electronic zoom function. It is not clear how the electronic zoom function relates to the other claimed elements and/or within the optical apparatus. Further, if the “electronic zoom function” is functional language only, there is no structure in the claim to provide this function. Also, the functional recitations in the claim language do not provide adequate structural relationship of the optical system within the optical apparatus, or the variable optical property element to the optical system and/or the optical apparatus. While features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claim 22, the optical apparatus has a variable optical property element, a driving circuit driving the variable optical property element, at least one optical unit and an electronic zoom function. It is not clear how the electronic zoom function relates to the other claimed elements and/or within the optical apparatus. Further, if the “electronic zoom function” is functional language only, there is no structure in the claim to provide this function. Also, the functional recitations in the claim language do not provide adequate structural relationship of the optical system within the optical apparatus, or the variable optical property element to the optical system and/or the optical apparatus. While features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. This is because apparatus claims cover what a device is, not what a device does. Note MPEP 2114.

In claim 32, an electronic imaging apparatus having a stop and an image sensor, wherein no structural relationship is given for these claimed elements. Further, the functional statement of "when electronic zoom is performed," has no structural support.

With respect to the dependent claims of the above indicated claims, they also incorporate the above indefiniteness by virtue of their dependency.

Further, the following dependent claims are rejected as being indefinite as described below:

In claim 20, the Examiner is not sure what is being claimed at all. The entire claim is a functional recitation with out any apparent structural support.

In claim 21, only a function is recited. Further, there is not even a structural relationship of the function to the other claimed elements, as noted above with respect to claim 2. Please note the information regarding functional recitations given above, as noted from MPEP 2114.

In claims 24 and 25, there is no structural relationship of the image sensor and its pixels, to the other claimed elements, as noted above with respect to claim 2.

In claims 26 and 28, there is absolutely no structural relationship with the means of these claims and the claim it depends from, claim 2.

In claim 31, there appears to be only functional recitations. Please note the information regarding functional recitations given above, as noted from MPEP 2114.



Art Unit: 2873

Additional rejections under 35 U.S.C. 112, second paragraph, for being indefinite:

7. Claims 24 and 25 recite the limitation "the number of pixels of an image sensor" in lines 4 and 1, respectively. There is insufficient antecedent basis for this limitation in the claim.

8. The term "optimized" in claims 1, 4, 5 and 6; the term "improved" and "improve" respectively, in claims 12, 22 and 31; and the term "best" in claims 13-15 and 20, are relative terms, which render the respective claims indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

9. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. These claims are considered to be omnibus type claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2873

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10, 12-15, 16, 18, 19, 20, 22, 28 and 31, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Wada et al (U.S. Patent 4,950,054).

Wada et al is interpreted as disclosing the claimed invention of an optical apparatus, as noted for example in Figure 7, having an optical system provided with a variable optical property element (2 and/or 4). With respect to the functional claim recitations, ray deflection is accommodated through the zooming functions of Wada et al's optical apparatus. Since the prior art teaches the claimed structural limitations of the claimed invention, and the claimed invention must be distinguished from the prior art in terms of structure rather than function, Wada et al is interpreted as meeting the claimed invention.

Wada et al further discloses a driving circuit (i.e. 136-139, 130, 141-143) for driving the variable optical-property element, and at least two optical element units (2 and 4) wherein at least one of the optical element units is subjected to a change when electronic zooming is performed. Note Figure 7 and its accompanying text.

Wada et al also discloses an image sensor (5) in the optical apparatus, as noted in Figure 7, for example.

Art Unit: 2873

11. Claims 1-10, 12-15, 16, 18, 19, 20, 22, 23, 28, 31 and 32, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Iijima et al (U.S. Patent 5,144,492).

Iijima et al is interpreted as disclosing the claimed invention of an optical apparatus, as noted for example in Figures 1 and 3, having an optical system provided with a variable optical property element (1, 2, 3 and/or 5). With respect to the functional claim recitations, ray deflection is accommodated through the zooming functions of Wada et al's optical apparatus. Since the prior art teaches the claimed structural limitations of the claimed invention, and the claimed invention must be distinguished from the prior art in terms of structure rather than function, Iijima et al is interpreted as meeting the claimed invention.

Iijima et al further discloses a driving circuit (i.e. 12, 14 and 22) for driving the variable optical-property element, and at least two optical element units (1-3, 5) wherein at least one of the optical element units is subjected to a change when electronic zooming is performed. Note Figures 1 and 3 and their accompanying text, for example.

Iijima et al also discloses an image sensor (6) in the optical apparatus, as noted in Figures 1 and 3, for example.

12. Claims 1-10, 12-15, 16, 18, 19, 20-22, 28 and 31, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Hamano (U.S. Patent 6,392,816 B1).

Hamano is interpreted as disclosing the claimed invention of an optical apparatus, as noted for example in Figures 1-3, for example, having an optical system provided with a variable optical property element (L1-L5). With respect to the functional claim recitations, ray deflection is accommodated through the zooming functions of Hamano's optical apparatus. Since the prior art teaches the claimed structural limitations of the claimed invention, and the claimed invention must be distinguished from the prior art in terms of structure rather than function, Hamano is interpreted as meeting the claimed invention.

Hamano further discloses a driving circuit (as noted in the description, for example at col. 4, lines 17-63, wherein providing a driving circuit to move lens units in a zoom lens system is considered to be inherent to the invention) for driving the variable optical-property element, and at least two optical element units (L1-L5) wherein at least one of the optical element units is subjected to a change when electronic zooming is performed. Note, for example, Figures 1-3 and their accompanying text.

Hamano also discloses an image sensor (IP) in the optical apparatus, as noted in Figures 1-3, for example.

Hamano also discloses an image shake correcting function, as noted in Figures 1-3, at elements 7 and 8, as well as lens unit L3.

13. Claims 1-32, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Ide et al (U.S. Patent Pub. 2002/0101646 A1).

Ide et al is interpreted as disclosing the claimed invention of an optical apparatus having an optical system provided with a variable optical-property element, as especially noted, for example, in Figures 11, 12, 15, 16, 17, 30 and 37, as well as their accompanying text of Ide et al, including a variable mirror, a variable focal length lens, and/or a zoom optical system, as well as an electronic zoom function and/or a driving circuit for driving the variable optical-property element(s).

14. Claims 1-32, as far as these claims are understood, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nishioka (U.S. Patent 6,437,925 B1).

Nishioka is interpreted as disclosing the claimed invention of an optical apparatus having an optical system provided with a variable optical-property element, as especially noted, for example, in Figures 13, 16, 29-31, 38, 39, 44, 50, 51, 54-57 and 68, as well as their accompanying text of Nishioka, including a variable mirror, a variable focal length lens, and/or a zoom optical system, as well as an electronic zoom function and/or a driving circuit for driving the variable optical-property element(s).

15. Claims 1-32, as far as these claims are understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Wakai et al (U.S. patent Pub. 2004/0190154 A1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Wakai et al discloses the claimed invention of an optical apparatus having an optical system provided with a variable optical-property element, as noted in nearly every Figure of Wakai et al, including a variable mirror, a variable focal length lens, and/or a zoom optical system, as well as an electronic zoom function and/or a driving circuit for driving the variable optical-property element(s).

Note in Wakai et al, for example at Figures 1, 2 and 9-13, wherein an optical apparatus (Fig. 1), having an optical system provided with a variable optical-property element (2), such as a variable mirror element (note Figures 2 and 9-13), wherein a driving circuit (11-13) drives the variable optical-property element (note Figures 9-13, for example).

Wakai et al's Figures 16A, 16B and 18, depict an optical apparatus having an optical system provided with a variable optical-property element, such as a variable mirror element (22), as well as an electronic zoom function (34,35) and a driving circuit (30) for driving the variable optical-property element(s). Figures 16A and 16B also have at least two optical element units (130,131,135, for example) and a stop (124).

Wakai et al's Figure 30 depicts an optical apparatus having an optical system provided with a variable optical-property element, such as a variable focal length lens (22', 28), as well as an electronic zoom function (34,35) and a driving circuit (30) for driving the variable optical-property element(s). Also depicted by Figure 30, an image sensor (24) and driving information (26).

With respect to claim 21, please note, for example, Figure 33, element 424.

With respect to claims 24 and 25, these conditions are inherent to the optical apparatus because the value of the electronic zoom magnification will need to be greater than about 1, or even 1.05, in order to have magnification; as well as being less than about 13.4, which is the lowest approx. value of:  $30 \times \sqrt{M/10^6}$ .

With respect to claims 7-11 and 29-30, they recite intended use only. A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus, if the prior art apparatus teaches all the structural limitations of the claim.

16. Claims 1-32, as far as these claims are understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Nishioka (U.S. Patent 6,865,009 B2), Sekiyama et al (U.S. Patent 6,801,370 B2), Hishioka (U.S. Patent 6,791,741 B2), and Nishioka (U.S. Patent 6,738,199 B2).

The applied references have a common inventor and/or assignee with the instant application. Based upon the earlier effective U.S. filing date of the references, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

All of the references disclose the claimed invention of an optical apparatus having an optical system provided with a variable optical-property element, as noted in

Art Unit: 2873

the Figures of each reference, as well as the accompanying text, wherein the invention includes a variable mirror, and/or a variable focal length lens, and/or a zoom optical system, as well as an electronic zoom function and a driving circuit for driving the variable optical-property element(s).

### ***Double Patenting***

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claims 1-9, 11-20, 22, 23, 28 and 30-32, as far as these claims are understood, are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,437,925 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other



because the application claimed invention is but a variation of the patent claimed invention.

The patent claimed invention and the application invention both recite an optical apparatus or imaging optical apparatus, having a variable optical-property element, such as a variable mirror (which is a reflecting-type variable optical-property element), and a zoom optical system, as well as an electronic zoom function and a driving circuit for driving the variable optical-property element(s).

With respect to the "ray deflection" functional claim language, the patent claimed invention compensates for aberrations to improve the image quality, as especially noted in claim 19, for example of the patent. The functional language of the application is considered to be a mere rewording of similar functions, wherein the functions would be obvious to one of ordinary skill in the art. Therefore the patent claimed invention and the application claimed invention are but obvious variations of each other.

19. Claims 1-23, 28 and 30-32, as far as these claims are understood, are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,738,199 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application claimed invention is but a variation of the patent claimed invention.

The patent claimed invention and the application invention both recite an optical apparatus or imaging optical apparatus, having a variable optical-property element, such as a variable mirror (which is a reflecting-type variable optical-property element),

Art Unit: 2873

and/or a variable focal lens element, and a zoom optical system, as well as an electronic zoom function and a driving circuit for driving the variable optical-property element(s).

With respect to the "ray deflection" functional claim language, the patent claimed invention compensates for aberrations to improve the image quality, as especially noted in claim 19, for example of the patent. The functional language of the application is considered to be a mere rewording of similar functions, wherein the functions would be obvious to one of ordinary skill in the art. Therefore the patent claimed invention and the application claimed invention are but obvious variations of each other.


### ***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn A. Lester whose telephone number is (571) 272-2332. The examiner can normally be reached on subject to an increased flex schedule, M-F, 10-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Evelyn A. Lester  
Primary Examiner  
Art Unit 2873

  
eal

January 31, 2006